1021 AAGATCTGATGAAGCCCAGCGTGTTTTTAAAGTTTCGAAGAGACTTTCATGCGACAAAAG 1080 Sequence 1, Application US/08101624
; Sequence 1, Application US/08101624
; Patent No. 5942667
; GENERAL INFORMATION:
 APPLICANT: Freeman, Gordon J.
 APPLICANT: Freeman, Gordon J.
 APPLICANT: Gray, Gary S.
 TITLE OF INVENTION: Uses Therefor
 NUMBER OF SEQUENCES: 25
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: LAHIVE & COCKFIELD
 STREET: 60 State Street, Suite 510
 CITY: Boston
 CITY: Massachusetts
 CONTINENTIAL OF STREET: 60 STATES ADDRESSES
 CONTINENTIAL OF STREET: 60 STATES ADDRESSES
 STATES MASSACHUSETTS 1081 rgaracargririraarraaagagraaagccccaaaaaaa 1120 COMPUTER READBLE FORM:
MEDIUM TYEE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/101,624
FILING DATE: 26-JUL-1993
PRIOK APPLICATION: 514
PRIOK APPLICATION NUMBER: BPLOATE: ATORNEY/AGENT INFORMATION:
APPLICATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: 36,207
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: RPI-004
TELEPHONE: (617) 227-7400
TELEPHONE: (617) 227-5941
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
TYPE: MOLGEIC acid
STARNEDDRESS: SINGLE
TYPE: Inner
MOLECULE TYPE: CDNA CDS 107..1093) NAME/KEY: ; LOCATION: US-08-101-624-1 COUNTRY: JS-08-101-624-1 셤 g ò ô 720 780 780 TCTGAAGATTCAAGCTTATTCAATGAGACTGCAGACCTGCCATGCCAATTTGCAAACTC 240 TCTGAAGATTCAAGCTTATTTCAATGAGACTGCAGACTGCCATGCCAATTTGCAAACTC 240 TCAAAACCAAAGCCTGAGTGAGCTAGTATTTTTGGCAGGACCAGGAAAACTTGGTTCT 300 241 rchahaccahagccrgagrgagcragragragrarrrrggcaggaccaggahacrrggrrcr 300 CACAAGITITIGATICGGACAGITGGACCCTGAGACTICACAATCTICAGATCAAGGACAA 420 CACAAGTITICATITCGGACAGTIGGACCCTGAGACTICACAATCTICAGATCAAGGACAA 420 480 421 GGGCTTGTATCATGTATCATCCATCAAAAAGCCCACAGGAATGATTCGCATCCACCA 480 GATGAATICTGAACTGTCAGTGCTTGCTAACTTCAGTCAACCTGAAATAGTACCAATTTC 540 540 TAATATAACAGAAAATGTGTACATAAATTTGACCTGCTCATCTATACACGGTTACCCAGA 600 999 601 ACCTAAGAAGAAGAGGGTGTTTGCTAAGAACCAAGAATTCAACTATCGAGTATGATGGTGT 660 720 GAGTGGGGTCATTTCCAGATATTAGGTCACAGCAGAAGCAGCCAAAATGGATCCCCAGTG 120 61 gagraccentriccagaratraccicacadaaccacagcaacaararccaracaara CACTATGGGACTGAGTAACATTCTCTTTGTGATGGCCTTCCTGCTCTCTGGTGCTGCTCC 180 GAATGAGGTATACTTAGGCAAAGAGAAATTTGACAGTGTTCATTCCAAGTATATGGGCCG 360 1 cacadodrigaaadcriridcricricricricricriaaacaddadacadadacadadada 60 GGGCTTGTATCAATGTATCCATCACAAAAAGCCCCACAGGAATGATTCGCATCCACCA ACCIAAGAAGAIGAGIGITIIGCIAAGAACCAAGAAIICAACIAICGAGIAIGAIGGIAI TATGCAGAAATCTCAAGATAATGTCACAGAACTGTACGACGTTTCCATCAGCTTGTCTGT TICATICCCIGATGITACGAGCAATAIGACCAICTICIGIATICTGGAAACTGACAAGAC 1 CACAGGGTGAAAGCTTTGCTTCTCTGCTGTAACAGGGACTAGCACAGACACGGAT Gaps 0 Length 1120; Indels ; 0 DB 2; 100.0%; Score 1120; 100.0%; Pred. No. 0; iive 0; Mismatches Best Local Similarity 100. Matches 1120; Conservative 661 61 121 181 181 241 301 361 361 421 481 541 601 721 Query Match Best Local В d G ò a ò 엄 δ 8 g à d ò qq ò g δ g δ a 8 g à ò

ò 120 61 GAGTGGGGTCATTTCCAGATATTAGGTCACAGAGGAGCAGCAAAATGGATCCCCAGTG 120 180 180 9 9 61 GAGTGGGGTCATTICCAGATATTAGGTCACAGCAGAAGCAGCAAAAAGAACCCCCAGTG CACAGGGTGAAGGTTTGCTTCTCTGCTGTAACAGGGACTAGCACAGACACGGAT CACTATGGGACTGAGTAACATTCTTTGTGATGGCCTTCCTGCTCTCTGGTGCTGCTCC CACTATGGGACTGGATAACATTCTCTTTGTGATGGCCTTCCTGCTCTTGGTGCTGCTCC 1 CACAGGGTGAAAGCTTTGCTTCTCTGCTGCTAACAGGGACTAGCACAAGACACGGAT Gaps ö Length 1120, Indels .; 0 DB 2; Query Match
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1120; Conservative 0; Mismatches 121 121 g ò 셤 ò & 셤

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> 781 GCGGCTTTTATCTTCACCTTTCTCTATAGAGCTTGAGGACCCTCAGCCTCCCCCAGACCA 781 GCGGCTTTTATCTTCACCTTTCTCTATAGAGCTTGAGGACCCTCAGCCTCCCCAGACCA CATTCCTTGGATTACAGCTGTACTTCCAACAGTTATTATATATGTGATGGTTTTCTGTCT 841 CATTCCTTGGATTACAGCTGTACTTCCAACAGTTATTATATGTGTGATGGTTTTCTGTCT AATTCTATGGAAATGGAAGAAGAAGAAGCGGCCTCGCAACTCTTATAAATGTGGAACCAA

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961

CACAATGGAGAGGGAAGAGAGTGAACAGACCAAGAAAAAGAGAAAAAATCCATATACCTGA 1020

901 AATTCTATGGAAATGGAAGAAGAAGAAGGGGCCTCGCAACTCTTATAAATGTGGAACCAA 960

1021 AAGATCTGATGAAGCCCAGCGTGTTTTAAAAGTTCGAAGACATCTTCATGCGACAAAAG 1080

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, NAME/KEY:
, LOCATION:
US-08-456-104-1
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Sequence 1, Appli
Sequence 1, Appli
Sequence 22, Appl
Sequence 22, Appli
Sequence 3, Appli
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Sequence 22, Appli
Sequence 22, Appli
Sequence 24, Appli
                                                              March 20, 2004, 12:25:16 ; Search time 87.5067 Seconds (without alignments) 7102.827 Million cell updates/sec
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1 CACAGGGTGAAAGCTTTGCT......AGAGTAAAGCCCAAAAAAA 1120
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'GGD2 6/ptodata/2/ina/5A COMB.seq:*
'GGD2 6/ptodata/2/ina/6A COMB.seq:*
'GGD2 6/ptodata/2/ina/6A COMB.seq:*
'GGD2 6/ptodata/2/ina/6E COMB.seq:*
'GGD2 6/ptodata/2/ina/PCTUS COMB.seq:*
'GGD2 6/ptodata/2/ina/PCTUS COMB.seq:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                                                                   682709 seqs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
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Maximum Match 100%
Listing first 45 summaries
                                           OM nucleic - nucleic search, using sw model
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Gapop 10.0 , Gapext 1.0
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Match Length DB
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No.
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44	ກັ	Sequence 3, Appli	Sequence 20, Appl	Sequence 20, Appl	Sequence 20, Appl	Sequence 20, Appl	Sequence 22, Appl	Sequence 22, Appl	Sequence 22, Appl	Sequence 12, Appl	Sequence 12, Appl	Sequence 12, Appl	Sequence 12, Appl	Seguence 44, Appl	Sequence 44, Appl	Sequence 44, Appl	Seguence 46, Appl
US-08-913-612A-34	TOS-09-303-040-5	2 US-08-456-104-3	J US-08-205-697A-20	3 US-08-702-525-20	US-09-837-867A-20	5 PCT-US95-02576-20	3 US-08-479-744A-22	3 US-08-280-757B-22	1 US-09-425-762-22	3 US-08-205-697A-12	3 US-08-702-525-12	1 US-09-837-867A-12	5 PCT-US95-02576-12	3 US-08-479-744A-44	3 US-08-280-757B-44	1 US-09-425-762-44	3 US-08-479-744A-46
751 4	1080 4	1151 2	1151 3	1151 3	1151 4	1151 5	1163 3	1163 3	1163 4	1261 3	1261 3	1261 4	1261 5	330	330 3	330 4	306 3
65.9	47.6	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	35.2	35.2	35.2	35.2	29.0	29.0	29.0	27.3
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961 CACAATGGAGGGAAGAGAGTGAACAGACCAAGAAAAGAGAAAAAATCCATATACCTGA 1020
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parent No. 1020020098542A1

GENERAL INFORMATION:
APPLICANT: Sharpe, Arlene H.
APPLICANT: Ereeman, Gordon J.
APPLICANT: Ereeman, Gordon J.
APPLICANT: Natler, Molecules and Uses Therefor
TITLE OF INVENTION: No. US20020098542A1e1 Forms of T Cell Costimulatory
TITLE OF INVENTION: No. US20020098542A1e1 Forms of T Cell Costimulatory
TITLE OF INVENTION: No. US20020098542A1e1 Forms of T Cell Costimulatory
TITLE OF INVENTION: No. US20020098542A1e1
FILE REFERENCE: BMI-12CCPADV
CURRENT FILING DATE: 2001-04-17
FRIOR FILING DATE: 1994-03-02

NUMBER OF SEQ ID NOS: 42

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 22

LENGTH: 1120
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                                 601 ACCTAAGAAGATGAGTGTTTTGCTAAGAACCAAGAATTCAACTATCGAGTATGATGGTAT
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) NAME/KEY: CDS

) LOCATION: (107)...(1093)

US-09-837-867A-22
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100.0%; Score 1120;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1120; Conservative 0; Mismatches
APPLICATION NUMBER: US 07/864,805
FILING DATE: 7-APR-1992
APPLICATION NUMBER: US 08/247,505
FILING DATE: 23-MAY-1994
APPLICATION NUMBER: US 07/864,866
FILING DATE: 7-APR-1992
APPLICATION NUMBER: US 07/864,807
FILING DATE: 25-MAR-1994
APPLICATION NUMBER: US 07/864,807
FILING DATE: 15-MAR-1994
APPLICATION NUMBER: US 07/902,467
FILING DATE: 13-NOV-198
APPLICATION NUMBER: US 07/25,433
FILING DATE: 16-JUMB-1992
APPLICATION NUMBER: US 07/25,433
FILING DATE: 33-NOV-1988
APPLICATION NUMBER: US 07/275,433
FILING DATE: 33-NOV-1988
APPLICATION NUMBER: US 07/275,433
FILING DATE: 13-NOV-1988
APPLICATION NUMBER: US 07/275,433
FILING DATE: 10-JUMB-1992
APPLICATION NUMBER: US 07/275,433
FILING DATE: 10-JUMB-1998
APPLICATION NUMBER: RPI-002CP4
REFERENCE/DOCKET NUMBER: RPI-002CP4
TELEFAX: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEC ID NO: 3:
SERANDENDES: SINGLE
TYPE: NUCleic acid
TYPE: NUCleic acid
TYPE: DANA
MOMERTE: TYPE: CDNA
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LOCATION: 107..1093
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Sequence 3, Appli
Sequence 25, Appl
Sequence 25, Appl
Sequence 24, Appl
Sequence 556, Appl
Sequence 556, Appl
Sequence 556, Appl
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Sequence 120, App
Sequence 295, App
Sequence 33, Appl
                                                                                                                                                                                                                                                March 20, 2004, 15:17:36; Search time 417.373 Seconds (without alignments) 9926.505 Million cell updates/sec
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1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
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ALIGNMENTS

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TICATICCCTGAIGITACGAGCAATAIGACCAICTICTGTATICTGGAAACTGACAAGAC

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the pCDM8 expression vector employing the following strategy. Initial sequencing was performed using sequencing primers F7 (AAQ81352), (CDM8R (AAQ81353) (Initial sequencing primers F7 (AAQ81352), (CDM8R of the clone B7-2 cDMA. Sequencing was performed using dye terminator chemistry and an ABI automated DMA sequencer. DMA sequence both using these primers was used to design additional sequencing primers (see AAQ81334-Q8163). This cycle of sequencing and selection of additional primers was continued until the B7-2 cDMA sequence is given in AAQ81351. The predicted protein sequence (AAM87984) exhibits many features common both strands. The human B7-2 clone 29 cDMA sequence is given in AAQ81351. The predicted protein sequence (AAM87984) exhibits many features common che signal peptide the resulting membrane-bound protein would have an unmodified mol. wt. of approx. 34 kDa. The extracellular domain contains eight potential N-11mked glycosylation sites. E. coll transfected with a vector contg. the cDMA insert of clone 29 was deposited under ATCC 69357 on July 26 1993. (Updated on 25-MAR-2003 to correct PN field.) GAGTGGGGTCATTTCCAGATATTAGGTCACAGCAGAAGCAGCCAAAATGGATCCCCAGTG 120 GAGTGGGGTCATTTCCAGATATTAGGTCACAGCAGAAGCAGCCAAAATGGATCCCCAGTG 120 180 CACTATGGGACTGAGTAACATTCTCTTTGTGATGGCCTTCCTGCTCTCTGGGGGCTGCTCC 180 240 240 TCAAAACCAAAGCCTGAGTGAGCTAGTAGTATTTTGGCAGGACCAGGAAAACTTGGTTCT 300 GAATGAGGTATACTTTAGGCAAAGAGAAATTTGACAGTGTTCATTCCAAGTATATGGGCCG 360 GAATGAGGTATACTTAGGCAAAGAGAAATTTGACAGTGTTCATTCCAAGTATATGGGCCG 360 420 CACAAGTITIGATICGGACAGTIGGACCCIGAGACTICACAAICTICAGAICAAGGACAA 420 480 480 9 TCTGAAGATTCAAGCTTATTTCAATGAGACTGCAGACCTGCCATGCCAATTTGCAAACTC CACAGGGTGAAAGCTTTGCTTCTCTGCTGCTGTAACAGGGACTAGCACAGACACACGGAT CACTATGGGACTGAGTAACATTCTCTTTGTGATGGCCTTCCTGCTCTCTGGTGCTGCTCC TCTGAAGATTCAAGCTTATTTCAATGAGACTGCAGACCTGCCATGCCAATTTGCAAACTC TCAAAACCAAAGCCTGAGTGAGCTAGTATTTTGGCAGGACCAGGAAAACTTGGTTCT CACAAGTTTTGATTCGGACAGTTGGACCCTGAGACTTCACAATCTTCAGATCAAGGACAA GGGCTTGTATCAATGTATCATCCATCACAAAAAGCCCACAGGAATGATTCGCATCCACCA GGGCTTGTATCAATGTATCATCCATCACAAAAAGCCCACAGGAATGATTCGCATCCACCA ô DB 2; Length 1120; Sequence 1120 BP; 354 A; 237 C; 230 G; 299 T; 0 U; 0 Other; 0; Indels Query Match
100.0%; Score 1120;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1120; Conservative 0; Mismatches 61 61 121 121 181 181 241 241 301 301 361 361 421 421 \$ 셤 ò g õ g õ Ob ò Db ò d ð 8 8 8 8

1080 1020 1020 1080 900 900 960 960 CTLA4; CD28; ligand; B7-2; B lymphocyte antigen; B-cell; costimulation; immunoglobulin; antibody; autoimmune disease; allergy; tumour; vaccine; graft versus host disease; T-cell; T lymphocyte; TH2 response; immunosuppressive; immunostimulant; therapy; ss. 1021 AAGATCTGATGAAGCCCAGCGTGTTTTTAAAAGTTCGAAGACATCTTCATGCGACAAAG 841 CATTCCTTGGATTACAGCTGTACTTCCAACAGTTATTATATGTGTGATGTTTTTCTGTCT AATTCTATGGAAATGGAAGAAGAAGAGCGGCCTCGCAACTCTTATAAATGTGGAACCAA CACAATGGAGGGAAGAGAGTGAACAGACCAAGAAAAGAGAAAAAATCCATATACCTGA **AAGATCTGATGAAGCCCAGCGTGTTTTTAAAAGTTTCGAAGACATCTTCATGCGACAAAAG** 781 GOGGCTTTTATCTTCACCTTTCTCTATAGAGCTTGAGGACCCTCAGCCTCCCCAGACCA CATTCCTTGGATTACAGCTGTACTTCCAACAGTTATTATATATGTGTGATGGTTTTTCTGTCT AATTCTATGGAATGGAAGAAGAAGCGGCCTCGCAACTCTTATAAATGTGGAACCAA down ö TGATACATGITITIAATTAAAGAGTAAAGCCCAAAAAAA 1120 rgaracargrirrraarraaagagraaaggcccaaaaaaa 1120 to enhance - used Example 4; Page 93-94; 171pp; English Human B lymphocyte antigen B7-2 cDNA. Location/Qualifiers 107. .1096 (DAND) DANA FARBER CANCER INST INC (REPK) REPLIGEN CORP. fusion protein gs AAT49181 standard; cDNA; 1120 Gray 95US-00479744 /*tag= a 107. .175 /*tag= b 176. .1093 /*tag= c (first entry) Nadler LM, WPI; 1997-077269/07. P-PSDB; AAW08467. a B7-2 lymphocyte antigens Homo sapiens WO9640915-A2 06-JUN-1996; encoding 07-JUN-1995; 08-APR-1997 Freeman GJ, sig_peptide mat_peptide 19-DEC-1996 901 901 196 1021 1081 1081 AAT49181; 781 841 196 AAT491811
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541 TAATATAACAGAAAATGTGTACATAAATTTGACCTGCTCATCTATACACGGTTACCCGGA 600

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601 601 661 661 721

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ACCTAAGAAGATGAGTGTTTTGCTAAGAACCAAGAATTCAACTATCGAGTATGATGGTAT

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5.1.6
Compugen Ltd.
GenCore version
Copyright (c) 1993 - 2004
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- nucleic search, using sw model OM nucleic March 20, 2004, 11:44:16 ; Search time 473.137 Seconds
 (without alignments)
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US-09-962-969B-22

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IDENTITY NUC Gapoxt 1.0 Scoring table:

3373863 segs, 2124099041 residues Searched: Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

N Geneseq_29Jan04:* L: geneseqn1980s:* 2: geneseqn1990s:* Database :

genesequ2001as; genesequ2001bs; genesequ2001bs; genesequ2003as; genesequ2003bs; genesequ2003bs; geneseqn2004s:* Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Aaq81351 Human B l	н	4	σ.	Abv72340 Nucleotid	Aad27968 Human B7-	Aad60974 Human CD2	Aaz29321 Human B7.	Abl64678 Stomach c	Abl63096 Breast ca	m		Aag85873 B70 type		Aav83208 B7-2 cDNA	Aad25510 Human co-	Aav03230 DNA encod	m	Aaf89731 Nucleotid	Aaz27914 Canine B7	Aaz27913 Canine B7	Aaz27915 Canine B7	Aaz27916 Complemen
SUMMARIES	ID	AA081351	AAT49181	AAV55784	AAC84049	ABV72340	AAD27968	AAD60974	AAZ29321	ABL64678	ABL63096	ABK84193	ADD25559	AAQ85873	AAH72616	AAV83208	AAD25510	AAV03230	AAV80293	AAF89731	AAZ27914	AAZ27913	AAZ27915	AAZ27916
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oķo	Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.9	88.9	88.9	88.9	88.9	88.9	88.9	86.8	86.8	67.2	64.6	64.6	53.3	53.3	51.4	51.4
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Aat62939 Chimeric Aaz27929 Feline B7	Aaz27930 Feline B7	Aaz27931 Feline B7	Aaz27932 Complemen	Aaz34785 Cat CD86	8	Aal46840 Feline CD	Abk48230 cDNA enco	Aaa49661 Pig costi	Aaz27922 Canine B7	Aaz27921 Canine B7	Aaz27924 Complemen	Aaz27923 Canine B7	Aac00427 Human sec	Aav55785 Mouse B7-	Aat49182 Mouse B l	Aac84050 Murine B	Aag81366 Murine B	Aav89569 EST clone	Aat01046 Mouse B7-	Aat99926 Rat CD86
AAT62939 AAZ27929	AAZ27930	AAZ27931	AAZ27932	AAZ34785	AAZ34838	AAL46840	ABK48230	AAA49661	AAZ27922	AAZ27921	AAZ27924	AA227923	AAC00427	AAV55785	AAT49182	AAC84050	AAQ81366	AAV89569	AAT01046	AAT99926
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50.6 9.9	49.9	48.2	48.2	47.6	47.6	47.6	47.6	46.9	41.8	41.8	41.4	41.4	36.7	36.4	36.4	36.4	36.2	35.4	35.2	33.0
556.4		540	540	533.2	533.2	533.2	533.2	525	468.2	468.2	463.8	463.8	411.2	407.2	407.2	407.2	405.6	O,	394	369.2
	c 26	27	c 58		30			33	c 34	35	c 36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

CTLA4/CD28; counter receptor; B lymphocyte antigen; B7-2; ss. Human B lymphocyte antigen B7-2 (hB7-2-clone 29). AAQ81351 standard; cDNA; 1120 BP. (first entry) (revised) Homo sapiens 25-MAR-2003 20-AUG-1995 AAQ81351; AAQ81351

Location/Qualifiers 107. .1093 /*tag= a 94WO-US008423. WO9503408-A1 26-JUL-1994; 02-FEB-1995

(DAND) DANA FARBER CANCER INST INC. (REPK) REPLIGEN CORP. 93US-00101624. 93US-00109393. 93US-00147773. 26-JJL-1993; 19-AUG-1993; 03-NOV-1993;

Greenfield E; Gray GS, Freeman GJ, Nadler LM, WPI; 1995-075236/10. P-PSDB; AAR67984. - useful for Nucleic acids encoding CTLA4/CD28 counter receptor, B7-2 - enhancing or suppressing T-cell mediated immune responses.

Claim 4; Fig 8; 175pp; English.

A cDNA library was constructed in the pCDM8 vector using poly A+ RNA from the human anti-IgM activated B cells. Four clones were strongly positivie for B7-2 expression by indirect immunofluorescence using CTLA41g and flow cytometric analysis. The B7-2 cDNA insert in clone 29 was sequenced in

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATGAGGTATACTTAGGCAAAGAGAAATTTGACAGTGTTCCATTCCAAGTATATGGGCCG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACAAGITITIGATICGGACAGTIGGACCCIGAGACTICACAAICTICAGATCAAGGACAA 420
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of 15 or greater marks the beginning and end of the sequence. For information on obtaining this clone, please contact info@linage.llnl.gov.

Plate: LLAM11549 row: f column: 3
Seq primer: ml3rpl
High quality sequence stop: 709.
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60.7%; Score 679.8; DB 12; Length 753;
Best Local Similarity 98.9%; Pred. No. 1.1e-157;
Matches 747; Conservative 0; Mismatches 2; Indels 6;
660 TIATGCAGAAATCTCAAGATAATGTCACAGAACTG 694
                              667 TTATGCAGAAATCTCAAGATAATGTCACAGAACTG 701
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                                                                                                                   March 20, 2004, 11:47:41; Search time 3206.43 Seconds (without alignments) 10430.790 Million cell updates/sec
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1120
1 CACAGGGTGAAAGCTTTGCT......AGAGTAAAGCCCAAAAAAA 1120
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result Query No. Score March Length DB ID Description

1 683 61.0 709 13 BQ109553 BQ109553 imageqc.7

2 679.8 60.7 753 12 B1906246 BX396566 BX396566

4 598.6 57.7 889 13 BX396566 BX396566 BX396566 BX396566

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ALIGNMENTS

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Imageqc 7_2001/snm58bdrr81.y1 NIH_MGC_118 Home sapiens CDNA clone IMAGE:5218562 5', mRNA sequence.

ACCESSION
BQ109553
BQ109553
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BQ109553
BQ109553.1 GI:20159207
KEYWORDS
SOURCE
Home sapiens (human)
ORGANISM
Home sapiens (human)
ORGANISM
Home sapiens (human)
Fukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Home.

I (bases 1 to 709)
AUTHORS
Kale, P.I., Harsch, T.J., Folta, P.A., Nelson, D.O., Sanders, C.G. and Prange, C.K.

TITLE
The I.M.A.G.E. Consortium quality control effort: clone resequencing for verification
Unpublished (2001)
COMMENT
The I.M.A.G.E. Consortium
Lawrence Livermore National Laboratory
Livermore, CA, USA
Email: help@inage.llnl.gov
This read has been produced as part of the I.M.A.G.E. Consortium
quality control effort. High quality sequence is defined as having
100 or more base pairs with a phred quality value
where a sliding window of 4 base pairs with a phred quality value

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Freeman, G.J., Nadler, L.M., Gray, G.S. and Greenfield, E.
Fusion proteins of novel CTLA4/CD28 ligands and uses therefore
Patent: US 6130316-A 1 10-OCT-2000;
Location/Qualifiers
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/mol_type="unassigned DNA"
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US 6130316.
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                                                                   AAGATCTGATGAAGCCCAGCGT
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Unclassified.
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Location/Qualifiers
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/organism="unknown"
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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model	Run on: March 20, 2004, 12:21:06; Search time 4548.2 Seconds (without alignments) 10673.268 Million cell updates/sec	Title: Derfect score: .1120 Sequence: 1 CACAGGGTGAAAGCTTTGCTAGAGTAAAGCCCAAAAAAA 1120	Scoring table: IDENTITY NUC Gapop 10.0 , Gapext 1.0	Searched: 3470272 segs, 21671516995 residues	Total number of hits satisfying chosen parameters: 6940544	Minimum DB seq length: 0 Maximum DB seq length: 2000000000	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	Database : GenEmbl:* 1: 9D ba:* 2: 9D ba:* 4: 9D on:* 6: 9D on:* 7: 9D ph:* 9: 9D ph:* 10: 9D co:* 11: 9D ct:* 11: 9D ct:* 11: 9D ct:* 13: 9D un:* 14: 9D un:* 15: em fun:* 16: em fun:* 17: em ha:* 18: em in:* 22: em ov:* 22: em ov:* 23: em pat:* 24: em ph:* 25: em ph:* 26: em fun:* 27: em ph:* 28: em htg other:* 31: em htg other:* 32: em htg other:* 33: em htg other:* 34: em htg other:* 35: em htg other:* 36: em htg other:* 36: em htg other:* 37: em htg other:* 38: em htg other:*
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                                                                                                                                                                    CGTTATCAGTCAAAGCTGACTTCCCTACACCTAGTATATCTGACTTTGAAATTCCAACTT
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; Sequence 5, Application US/08456104
; Patent No. 596110
; GENERAL INFORMATION:
; APPLICANT: Freeman, Gordon J.
; APPLICANT: Radler, Lee M.
; APPLICANT: Gray, Gary, S.
; TITLE OF INVENTION: TUMOR CELLS M
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   CELL TYPE: B cell
IMMEDIATE SOURCE:
IMMEDIATE SOURCE:
LIBRARY: CDNA in pCDM8 vector
CLONE:
B7, Raji clone #13
PCSITION IN GENOME:
CHROMOSONE/SEGMENT: 3
FRATURE:
NAME/KEY: Open reading frame (translated region)
LOCATION: 318 to 1181 bp
LOCATION: 318 to 1181 bp
LOCATION: 1474 to 1479 bp
LOCATION: 1474 to 1479 bp
LOCATION: 1474 to 1479 bp
LOCATION INFORMATION:
AUTHORS: FREEDMAN, GORDON J.
AUTHORS: SEGIL, JEFFREY M.
AUTHORS: SEGIL, JEFFREY M.
AUTHORS: SIEL, GRACE
AUTHORS: NADLER, LEE M.
AUTHORS: NADLER, LEE M.
AUTHORS: NADLER, LEE M.
TILLE: Unique Expression On Activated And Neoplastic B Cells
JOURNAL: The Journal of Immunology
VOLUME: 143
ISSUE: B
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0; Mismatches
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; DATE: 15-OCT-1989
; RELEVANT RESIDUES IN SEQ ID NO:
US-08-147-772-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
100.0%;
Best Local Similarity 100.0%;
Matches 1491; Conservative 0;
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Sequence 1, Application US/08147772

Sequence 1, Application US/08147772

Sequence 1, Application US/08147772

BENERAL INFORMATION:

APPLICANT: Ostrand-Rosenberg, Suzanne

APPLICANT: Backar, Sivasubramanian

APPLICANT: Freeman, Gordon J.

APPLICANT: Freeman, Gordon J.

APPLICANT: Nadler, Lewor Cells With Increased Immunogenicity

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: LAHIVE & COCKFIELD

STREET: GO State Street, Suite 510

CITY: Boston

STATE: Massachusetts

COUNTRY: USA
  Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:

REDIUM TYPE: Rloppy disk
COMPUTER: READABLE FORM:
COMPUTER: READABLE FORM:
COMPUTER: IBM FO Compatible
COMPUTER: IBM C Compatible
COMPUTER: IBM C Compatible
COMPUTER: IBM C Compatible
COMPUTER: IBM C COMPUTER:
SOFTHARE: PATENTING DATA:
APPLICATION NUMBER: US/08/147,772
FILING DATE:
APPLICATION NUMBER: US/08/147,772
APPLICATION NUMBER: 36,207
FILING DATE:
ATTORNEY/AGENT INFORMATION:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
TELEPHONE: (617) 227-7400
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1491 Dase pairs
TTELEPHONES: double
TTORUGY: linear
MOLECULE TYPE: CDNA to mRNA
HYPOTHETICAL: no
US-09-535-370-207

US-08-812-946A-2

US-09-039-982A-32

US-09-039-61-32

US-09-039-641-32

US-09-039-762A-32

US-09-042-492D-32

US-09-042-492D-32

US-09-042-492D-32

US-09-101-945-1130

US-08-913-946A-3

US-09-303-040-1

US-09-303-040-1

US-09-303-040-1

US-09-495-052-61

US-08-102-525-35

US-08-102-525-35

US-08-103-05-697A-35

US-08-103-05-697A-35
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ORIGINAL SOURCE:
ORGANISM: Homo sapien
TISSUE TYPE: lymphoid
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1 CCABARGABARAGTGATTTGT.......CTATTABACACTARTTTGAG 1491
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2. /cgn2_6/ptodata/2/ina/5A_COMB.seq:*

3. /cgn2_6/ptodata/2/ina/6A_COMB.seq:*

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                                   GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-08-450-798-1

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US-08-450-798-1

US-08-450-788-1

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US-08-913-6428-31

US-09-039-641-31

US-09-039-641-31

US-09-039-641-31

US-08-131-612A-31

US-08-136-12A-31

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US-08-136-12A-31

US-08-136-12A-31

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1081 ATGGAATTTTTGTGATATGCTGCCTGACCTACTGCTTTGCCCCAAGATGCAGAGAGAAA 1140
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APPLICATION NUMBER: US 07/864,805

FILING DATE: 7-APR-1309

APPLICATION NUMBER: US 08/247,505

APPLICATION NUMBER: US 08/247,505

APPLICATION NUMBER: US 08/247,505

APPLICATION NUMBER: US 07/864,806

APPLICATION NUMBER: US 07/864,807

FILING DATE: 16-AUNB-1992

APPLICATION NUMBER: US 07/902,467

FILING DATE: 16-AUNB-1992

APPLICATION NUMBER: SA,207

FILING DATE: 23-NOV-1988

APPRICATION NUMBER: SA,207

REPERSOR CHARACTERISTICS: 16-AUNB-1982

APPRICATION NUMBER: RAP-1002CP4

TELECOMMUNICATION NUMBER: RAP-1002CP4

ANTERORS: RAP-1002CP4

ANTERORS: RESERVAN, ARNOLD S.

ANTERORS: RAP-1002CP4

ANTERORS: RA
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	Description	Sequence 1, Appli	Sequence 18, Appl	Sequence 18, Appl	Sequence 1, Appli	Н	Sequence 1, Appli	,	'n	Sequence 1, Appli	, ,	7	Ŋ	0	Sequence 15, Appl	Sequence 13, Appl
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ALIGNMENTS

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US-08-522-711.

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PUBLICATION NO. USCO20115214A1

GENERAL INCORNATION:

APPLICANT: Thompson, Craf H.

APPLICANT: Thompson, Craf B.

APPLICANT: Thompson, Craf B.

APPLICANT: Thompson, Craf B.

APPLICANT: Gary 3.

APPLICANT: Meshel, Gary 3.

APPLICANT: Remeart, Paul D.

ITTLE OF INVENTION Methods For Selectively Stimulating Proliferation Of T-Cells

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADRESS:

ADDRESSES: LAHIVE & COCKFILD

STREET: 60 State Street

COUNTY: USA

CONFUTER TRADALE FORM:

MEDIUM TYPE: POOPY disk

COMPUTER: DEAD FORM:

MEDIUM TYPE: POOPY disk

COMPUTER: DEAD FORM:

MEDIUM TYPE: POOPY disk

COMPUTER: DEAD FORM:

MEDIUM TYPE: APPLICATION NUMBER: US 08/415,816

FILING APPLICATION NUMBER: US 08/403,253

FILING DATE: 10-MRX-1995

PRILING DATE: 11-MRX-1995

PRILING DATE: 11-MRX-1995

PRILING DATE: 11-MRX-1995

PRILING DATE: 11-MRX-1995

PRILING DATE: 21-TEB-1994

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T- cell; CD28; CTLA4; ligand; T-lymphocyte response; metastasis; ds.
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Raji, clone no. 13. Its position in the genome is chromosome/segment 3. It was published by Freeman, F.J. et al., J. of Immunology, 143: 8: 2714-2722, 15th October 1989. It can be found in Genbank at Accession no. M27533. The encoded protein, R67989, binds both human CTLA4 and human CD28. It is related to human MB7.2 (see Q81351) and murine hB7 (see Q81372). (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                            Query Match
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1491; Conservative 0; Mismatches 0; Indels 0;
                                                                                                     Sequence 1491 BP; 419 A; 342 C; 312 G; 418 T; 0 U; 0 Other;
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March 20, 2004, 11:44:16; Search time 629.863 Seconds (without alignments) 10056.251 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqn20048:*

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ALIGNMENTS

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Q81371 is in pCDM8 vector. It is derived from lymphoid B cells, cell line
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                                                                                                                                              Location/Qualifiers
318. .1479
/*tag= a
1/474. .1479
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/note= "alternate poly-A signal"
                                                                                                                                                                                                                                                                                                                                                 Gray GS, Greenfield
                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 111-113; 175pp; English.
                   AAQ81371 standard; cDNA to mRNA; 1491 BP.
                                                                                       Human B lymphocyte antigen B7-1 (hB7-1).
                                                                                                                                                                                                                                                                                                                  (DAND ) DANA FARBER CANCER INST INC. (REPK ) REPLIGEN CORP.
                                                                                                           B lymphocyte antigen; B7-1; ss.
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93US-00109393.
93US-00147773.
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                                                         (revised)
(first entry)
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P-PSDB; AAR67989.
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19-AUG-1993;
03-NOV-1993;
                                                                                                                               Homo sapiens.
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21-AUG-1995
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                                      AAQ81371;
RESULT 1
AAQ81371
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AV717312 DCB Homo sapiens cDNA clone DCBELE05 5', mRNA sequence.
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1. (bases I to 56)

Xu, Xu, Gu, J., Liu, F., Qu, J., Zhao, M., Li, Y., Huang, Q., Zhou, J., Song, H., Gu, Y., Yang, Y., Gao, G., Xiao, H., Li, N., Qian, B., Gao, X., Cheng, Z., Xu, S., Gu, W., Tu, Y., Jia, J., Fu, G., Ren, S., Zhong, M., Lu, G., Cheng, Z., and Han, Z.

Homo sapiene colba DCB clones

Unpublished (2000)
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/lab_home="BMDS.8"
/clone lib="DOB"
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                                                                                                                 AV717312
AV717312.1 GI:10814464
EST.
Homo sapiens (human)
Homo sapiens
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43.0%; Score 640.8; DB 12; Length
Best Local Similarity 99.4%; Pred. No. 1.1e-179;
Matches 664; Conservative 0; Mismatches 2; Indels
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Homo sapiens (human)
Homo sapiens
Eukaryota; Matazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Matazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 713)
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: Gapphs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
Contact: Robert Strausberg, Ph.D.
Email: Gapphs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
Contact: Robert Strausberg, Ph.D.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be fround through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI1452 row: g column: 08
High quality sequence stop: 711.
CD366279 UI.H-FTI-
AA883817 op65a12.s
AN292318 71.H-B12-
BF475313 710H02.x
AW29099 UI.H-B12-
BF679513 710H02.x
AW370828 MR0-BT026
BB9362525 PM1-B1020
CG50325 CTT-H5P-2
CG643015 CST380481
CG55382 CST3763
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                      GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Score

Result õ

1381 TCTCCCCATATGCAATTTGCTTAATGTAACCTCTTTTTGCCATGTTTCCATTCTGCCA 1440

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Search completed: March 20, 2004, 18:14:16 Job time : 6059.8 secs

1020 1080 1140 1140 1200 1260 1260 1020 1080 1200 1320 1320 1380 1380 1440 540 540 840 360 420 420 480 480 600 600 999 999 720 720 780 780 840 900 900 960 960 TTATCCACGTGACCAAGGGAAGTGAAAGAAGTGGCAACGCTGTCCTGTGGTCACAATGTTT CTGTTGAAGAGCTGGCACAAACTCGCATCTACTGGCAAAAAGGAGAAAAAGAAAATGGTGGTGA CTATGATGTCTGGGGACATGATATATGCCCGGGTACAAGAACCGGACCATCTTGATA TCACTAATAACCTCTCCCATTGTGATCCTGGCTCTGGCGCCCATCTGACGAGGGCACATACG AGTGTGTTGTTCTGAAGTATGAAAAGACGCTTTCAAGCGGGAACACCTGCTGAGTGA CIGAGCICIAIGCIGITAGCAGCAACIGGAITICAATAIGACAACCAACAACITICA AAGGGGCTGAAAAGATCTGAAGGTAGCCTCCGTCATCTCTTCTGGGATACATGGATCGTG AAGGGGCTGAAAAGATCTGAAGGTAGCCTCCGTCATCTCTTCTGGGATACATGGATCGTG TCTCCCCATAIGCAATTTGCTTAATGTAACCTCTTTTTGCCATGTTTCCATTCTGCCA CATACCTGAATTTCTTTCAGCTCTTTGGTGCTGGCTGGTCTTTCTCACTTCTGTTCAGGTG CATACCTCAATTTCTTTCAGCTCTTTGGTGCTGGCTGGTCTTTCTCACTTCTGTTCAGGTG CTATGATGTCTGGGGACATGAATATATGGCCCGAGTACAAGAACCGGACCATCTTTGATA TCACTAATAACCTCTCCATTGTGATCCTGGCTCTGCGCCCCATCTGAGGGCACATACG CTAATATTAGAAGGATAATTTGCTCAACCTCTGGAGGTTTTCCAGAGCCTCACCT GGTTGGAAAATGGAGAAGAATTAAATGCCATCAACAACAGTTTCCCAAGATCCTGAAA TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAACCA GGAGGAATGAGAGTTGAGAAGGGAAAGTGTACGCCCTGTATAACAGTGTCCGCAGAAGC GGAGGAATGAGAGATTGAGAAGGGAAAGTGTACGCCCTGTATAACAGTGTCCGCAGAAGC GGGATCATGAGGCATTCTTCCCTTAACAATTTAAGCTGTTTTACCCACTACCTCACTT TTATCCACGTGACCAAGGAAGTGAAAGAAGTGGCAACGCTGTCCTGTGGTCACAATGTTT AGTGTTGTTCTGAAGTATGAAAAAGACGCTTTCAAGCGGGAACACCTGGCTGAAGTGA CTAATATTAGAAGGATAATTTGCTCAACCTCTGGAGGTTTTCCAGAGCCTCCTCCT TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAACCA **ATGGAATTTTTGTGATATGCTGCCTGACCTACTTGCTTTTGCCCCAAGATGCAGAGAGAAAA** GGGATCATGAGGCATTCTTCCCTTAACAAATTTAAGCTGTTTTACCCACTACCTCACCTT 841 361 421 541 541 601 661 721 721 781 781 841 901 901 961 196 1081 1081 1141 1141 1201 1261 1261 1321 1381 301 361 421 481 481 601 199 1201 1321

CCAAAGAAAAGTGATTTGTCATTGCTTTATAGACTGTAAGAAGAACATCTCAGAAGT GGAGTCTTACCCTGAAATCAAAGGATTTAAAAAAAAAA	TTATCACGIGACCAAGGAAGTGAAGAAGTGGCAACGCTGTCCTGTGGTCACAATGTTT 480 CTGTTGAAGACTGGAACAACTCGCATCTACTGGCAAAAGGAGAAAAATGGTGCTGA 540 CTGTTGAAGACTGGCACAAACTCGCATCTACTGGCAAAAGGAGAAAAAATGGTGCTGA 540 CTGTTGAAGACTGGCACAAATTCGCATCTACTGGCAAAAGGAGAAAAAAAA	1021 AGCAAGAGTTTTCCTGATAACCTGCTCCCATCCTGGGCCATTACCTTAATCCATAA 1080 1021 AGCAAGAGCATTTTCCTGATAACCTGCTCCATCCTGGGCCATTACCTTAATCTCAGTAA 1080 1021 AGCAAGAGCATTTTCGTGATATGCTGCTCCTGCTTTTTGCCCAAGAGAGAG
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Qy 1 CCAAAGAAAAGTGATTTGTCATTGCTTTATAGACTGTAAGAAGAACATCTCAGAAGT 60 bb 1 CCAAAGAAAAAGTGATTTGTCATTTGTTTATAGACTGTAAGAAGAACATCTCAGAAGT 60 Qy 61 GGAGTCTTACCCTGAAATCAAAGGATTTAAAGAAAAAGTGGGAATTTTTCTTCAGCAAGCT 120	ttaccctgaaatcaaaggattaaagaaaaaggagattttcttcggcaag ctaaatccacaacctttggagacccaggaacaccctccaatctctgtgtgt 	OY 181 GIABACATCACTGGAGGGTCTTCTACGTGAGCAATTGGATTGTCALCAGCCCTGCCTGTT 240	OY 241 TIGGACCTGGGAAGIGCCCTGGICTTACTTGGGICCAAATTGTTGGCTTTCACTTTTGAC 300 100 241 TIGCACCTGGGAAGIGCCCTGGICTTACTTGGGICCAAATTGTTGGCTTTCACTTTGAC 300	OY 301 CCTAAGCATCTGAAGCCATGGGCCACACGGAGGCAGGGAACATCACCATCCAAGTGTC 360	Oy 361 CATACCTGAATTTCTTCAGCTCTTGGTGGTGGTCGTCTTTCTCACTTCTGTTCAGGTG 420 1	Oy 421 TTATCCACGTGAACGAAGTGAAAGTGGCAACGCTGTCCTGTGGTCACAATGTTT 480	Oy 481 CIGITGAAGAGCIGGCACAAACTCGCAICTACTGGCAAAAGGAGAAAATGCIGGCTGA 540	Oy 541 CIAIGAIGICIGGGGACAIGAAIAIAIGGCCCGAGIACAAGAACCGGACCAICITIGAIA 600 	Oy 601 TCACTAATAACTCTCCATTGTAATCCTGGCTCTGCGCCCATCTGAGGGCACATACG 660 [Oy 661 AGTGTTGTTCTGAAGTATGAAAAAGACGCTTTCAAGCGGGAACACCTGGCTGAAGTGA 720	721 CGITATCAGTCAAAGCTGACTTCCCTACACCTAGTATATCTGACTTTGAAATTCCAACCTT	OY 841 GGTTGGAAAATGGAGAATTAAATGCCATCAACAACAGTTTCCCAAGATCTGAAA 900	QY 901 CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTCAATATGACAACCAAC	QY 961 TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAACCA 1020	OY 1021 AGCAAGGATTTTCTGATAACCTGCTCCCATCCTGGGCCATTACCTTAATCTCGGTA 1080
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8 6 8 6 8 6 8 6	TTATCCACGTGACCAAGGAAGTGAAAGAAGTGGCAACGCTGTCCTGTGGTCACAATGTTT CTGTTGAAGAGCTGGCACAACTCGCATCTACTGGCAAAAGGAGAAGAAAAGAAATGGTGCTGA CTGTTGAAGAGCTGGCACAAACTCGCATCTACTGGCAAAAGGAGAAAAAAAA	LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL FEATURES SOURCE ORIGIN	AR381493 1491 bp DNA linear P. Sequence 18 from patent US 6608180. AR381493 15831493 15838149381 158381493 158381493 158381493 158381493 158381493 158381493 158381493 158381493 158381493 158381493 158381493 158381493 1583881493 158381493 158381493 15838149 15838149 15838149 15838149 15
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Sy do	901 CTGAGCTCTATGCTGTTAGCAGCAACTGGATTTCAATATGACAACCACCAGCTTCA 960 	상 엽	121 GIGARACTARANCCACACCTIGGAGACCCAGGAACACCCTCCAAICTCTGTGTGTTT 180
کې م <u>م</u>	961 TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAACCA 1020 	& 8	181 GTAAACAICACTGGAGGGTCTTCTACGTGAGAATTGGATTGTCATCAGCCCTGCCTG
S S	1021 AGCAAGACATTITCCTGATAACCTGCTCCCATCCTGGGCCATTACCTTAATCTCAGTAA 1080 1021 AGCAAGAGCATTITCCTGATAACCTGCTCCCATCCTGGGCCATTACCTTAATCTCAGTAA 1080	ò 8	241 TIGCACCIGGGAAGICCCCIGGICTTACTIGGGICCAAATIGTIGGCTTTCACTITIGAC 300 241 TIGCACCIGGGAAGICCCCCCGCTCATACTIGGGICCCAAAITGITGGCTTTCACTITIGAC 300
S S	1081 AIGGAAITITIGIGAIAIGCIGCCIGACCIACIGCITIGCCCCAAGAIGCAGAGAGAA 1140 	& 8	301 CCTAAGCATCTGAAGCCATGGGCCACACGGGGGGGAACATCACCATCCAAGTGTC 360
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\$ B	1201 AAGGGGCTGAAAAGATCTGAAGGTAGCCTCCGTCATCTTCTGGGATACATGGATGG	& A	421 TTATCCACGTGACCAAGGAAGTGAAAGAAGTGGCAACGCTGTCCTGTGGTCACAATGTTT 480
& Q	1261 GGGATCATGAGGCATTCTTCCCTTAACAAATTTAAGCTGTTTTACCCACTACCTCACCTT 1320 	\(\frac{4}{5} \)	481 CTGTTGAAGAGCTGGCACAAACTCGCCATCTACTGGCAAAAGGAGAAAAATGGTGCTGA 540
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S G	1441 TCTTGAATTGTCTTGTCAGCCAATTCATTATCTATTAACACTAATTTGAG 1491 	à d	661 AGTGTGTTCTGAAGTATGAAAAAGCGCTTTCAAGCGGGAACACCTGGCTGAAGTGA 720
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OY 1261 GGGATCATGAGGCATTCTTCCCTTAACAAATTTAAGCTGTTTTACCCACTACCTCT 1320	RESULT 11 AR374162 LOCUS LOCUS DEFINITION Sequence 28 from patent US 6605279. ACCESSION AR374162. VERSION AR374162.1 GI:40076753 KEYWORDS SOURCE Unknown. ORGANISM Unknown.	REFERENCE 1 (Dases 1 to 1491) AUTHORS Freeman, G.J., Nadler, L.M. and Gray, G.S. TITLE Therapeutic compositions for inhibiting the interactions of B7-1 and B7-2 with their natural ligands JOURNAL Patent: US 6605279-A 28 12-AUG-2003; FEATURES Location/Qualifiers Source /organism="unknown" /mol_type="mRNA"	Query Match Query Match Best Local Similarity 100.0%; Score 1491; DB 6; Length 1491; Best Local Similarity 100.0%; Pred. No. 0; Matches 1491; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Qy		181 GTAAACATCACGGGGGTCTTCTACGGGAATTGGATTGTCATCAGCCCTGCTGTT 181 GTAAACATCACTGGAGGGTCTTCTACGTGAGCAATTGGATTGTCATCAGCCCTGCTGTT 181 GTAAACATCACTGGAGGTCTTCTACGTGAGCAATTGGATTGTCATCACCTGCTGTT 241 TTGCACCTGGAAAATGCCCTGGTCTTACTTGGGTCTACAATTGTTGGCTTTTCACTTTTGAC 241 TTGCACCTGGAAAATGCCCTGGTCTTACTTGGGTCCAAATTGTTGGCTTTTCACTTTTTGAC 241 TTGCACCTGGAAAATGCCCTGGTCTTACTTGGGTCCAAATTGTTGGCTTTTCACTTTTTGAC 11	301 CCTAAGCATCTGAAGCCACGCCACCACGGGGGGGGGGGG
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JOURNAL Patent: US 6352694-A 1 05-MAR-2002; FEATURES 1.1491 SOURCE /organism="unknown" /Rol_type="unassigned DNA"	100.0%; Score 1491; DB 6; Length 1491; milarity 100.0%; Pred. No. 0; Conservative 0; Mismatches 0; Indels 0; Gaps	Oy 1 CCAAAGAAAAGTGATTTGTCATTGTCTTTATAGACTGTAAGAAGAACATCTCAGAAGT 60 	Oy 61 GGAGTCTTACCCTGAAATCAAAGGATTTAAAGAAAAAGTGGAATTTTTCTTCAGCAAGCT 120	Oy 121 GTGAAACTAAATCCACAACCTTTGGAGAACCCCGGGAACCCCTCCAATCTCTGTGTGTTTT 180	OY 181 GTAAACATCACTGGAGGGTCTTCTACGTGAQCAATTGGATTGTCATCAGCCCTGCTGTT 240	Oy 241 TIGCACCIGGGAAGIGCCCIGGICTTACTICGGICCAAAITGIIGGCITTCACITIIGAC 300	OY 301 CCTAAGCATCTGAAGCCATGGGCCACACACGGGGGAACATCACCATCCAAGTGTC 360	Qy 361 CATACCTGAATTTCTTTCAGCTCTTGGTGCTGGTCTTTCTCACTTCTGTTCAGGTG 420	Cy 421 TTATCCACGIGACCAAGGAAGTGAAAGTGGCAACGCTGTCCTGTGGTCACAATGTTT 480	Qy 481 CTGTTGAAGAGCTGGCAGAAACTCGCATCTACTGGCAAAAGAGAAAAATGGTGCTGA 540	Oy 541 CTATGATGTCTGGGGACATGAATATATGGCCCGAGTACAAGAACCGGACCATCTTTGATA 600	OY 601 TCACTAATAACCTCTCCATTGTGATCCTGGCTCTGGGCCCATCTGAGGGCACATACG 660 Db 601 TCACTAATAACCTCTCCATTGTGATCCTGGCTCTGGGCCCATCTGAGGAGGGCACATACG 660	Oy 661 AGTGTGTTGTTGAAGTATGAAAAGACGCTTTCAAGCGGGAACACCTGGCTGAAGTGA 720	OY 721 CGTTATCAGTCAAAGCTGACTTCCCTACACCTAGTATATCTGACTTTGAAATTCCAACTT 780	OY 781 CTAATATTAGAAGATAATTIGCTCAACCTCTGGAGGTTTTCCAGAGCCTCACCTCTCCT 840	Qy 841 GGTIGGAAAAIGGAGAAGTIAAATGCCATCAACACACAACAGTITCCCAAGAICCIGAAA 900 	ON 901 CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTCAATATGACAACCACGGCTTCA 960

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(bases 1 to 1491)
June, C.H., Thompson, C.B., Nabel, G.J., Gray, G.S. and Rennert, P.D.
Methods for inducing a population of T cells to proliferate using
agents which recognize TCR/CD3 and ligands which stimulate an
accessory molecule on the surface of the T cells
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Sturmhoefel, K., Wolf, S.F. and OGtoole, M.
Use of soluble costimulatory molecules to enhance immune response to soluble costimulatory molecules to enhance immune response.

Use of soluble costimulatory molecules to enhance immune response to soluble costimulatory molecules to enhance immune response.

GENETICS INSTITUTE INC
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BD272168
Use of soluble costimulatory molecules to enhance immune responses.
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I GI:33081936
JP 2002544170-A/1.
Homo sapiens (human)
Homo sapiens (human)
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                            TCACTAATAACCTCTCCCATTGTGATCCTGGCTCTGCGCCCATCTGACGAGGGCACATACG
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1381 TCTCCCCATATGCAATTTGCTTAATGTAACCTCTTTTTGCCATGTTTCCATTCTGCCA
1381 TCTCCCCATATGCAATTTGCTTAATGTAACCTCTTCTTTTGCCATGTTTCCATTCTGCCA
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Unclassified.
1 (bases 1 to 1491)
2 (bases 1 to 1491)
Catrand-Rosenberg, S., Baskar, S., Glimcher, L.H., Freeman, G.J.
Nadler, L.M.
Tumor cells with increased immunogenicity and uses therefor
Patent: US 6319709-A 1 20-NOV-2001;
Location/Qualifiers
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/mol_type="unassigned DNA"
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Sequence 1 from patent US 6319709.
AR178603 GI:20219741
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IORS Freeman, G.V., Nadler, L.M. and Gray, G.S.

IE Tumor cells modified to express B7-2 with increased immunogenicity and uses therefor

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